

### **REMARKS**

The present Amendment amends claims 1-4 and leaves claims 5 and 7 unchanged. Therefore, the present application has pending claims 1-5 and 7-10.

The specification stands objected to due to informalities noted by the Examiner in paragraphs 8 and 9 of the Office Action. Various amendments were made throughout the specification to correct the informalities noted by the Examiner. The specification was reviewed to uncover any other informalities and any such errors that were uncovered were corrected. Therefore, this objection is overcome and should be withdrawn.

The Examiner is respectfully requested to identify any other informalities the Examiner may be aware of so that such informalities can be immediately corrected to expedite prosecution of the present application.

Claims 1-11 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. Various amendments were made to claims 1-5 and 7-10 to bring them into conformity with the requirements of 35 USC §112, second paragraph. Therefore, Applicants submit that this rejection is overcome and should be withdrawn.

Specifically, amendments were made throughout the claims so as to overcome the objections noted by the Examiner in paragraphs 12-14 of the Office Action.

The Examiner's cooperation is respectfully requested to contact Applicants' Attorney by telephone should any further indefinite matters be discovered so that appropriate amendments may be made.

Claims 1-5 and 7-10 stand rejected under 35 USC §101 as allegedly being directed to non-statutory subject matter. Various amendments were made throughout claims 1-5 and 7-10 to cause such claims to be directed to statutory subject matter in accordance with 35 USC §101. Therefore, this rejection is overcome and should be withdrawn.

Specifically, amendments were made to the claims so as to more clearly recite that the present invention is directed to a method of production planning, implemented in a production planning system in response to a request for production planning from a terminal operated by a user, wherein the production planning system upon implementing the production planning method performs various steps including making flows of storage, formatting processes, inputting data, incorporating a target value, solving a linear programming problem, calculating a feasible real value and showing the real value calculated on a display of the terminal.

Thus, the present invention is directed to a method implemented in a system, said system being a machine as defined under 35 USC §101. Therefore, the amended claims recite statutory subject matter as per the requirements of 35 USC §101. Accordingly, reconsideration and withdrawal of the 35 USC §101 rejection of claims 1-5 and 7-10 is respectfully requested.

Claims 1-5 and 7-10 stand rejected under 35 USC §112, first paragraph as allegedly failing to comply with the enablement requirement. Particularly, the Examiner alleges that there are no clear steps delineated in the claims to indicate how the calculated real value is used in production planning nor it is clear how the real value relates to the real world of production planning. Amendments were made to the claims to more clearly

recite that the present invention provides a method of production planning, implemented in a production planning system in response to a request for production planning from a terminal operated by a user, wherein the production planning system upon implementing the production planning method performs various steps one of which includes showing the real value calculated on a display of the terminal as the calculated management indices used to produce the products according to the production planning.

Thus, the claims now clearly recite steps as to how the calculated real value is used in production planning and how the real value relates to the real world of production planning being that the real value is the calculated management indices used to produce the products according to the production planning. Therefore, the claims as amended would enable one of ordinary skill in the art to make and/or use the invention. Therefore, reconsideration and withdrawal of the 35 USC §112, first paragraph rejection or claims 1-5 and 7-10 is respectfully requested.

Claims 1-5 and 7-10 stand rejected under 35 USC §103(a) as being unpatentable over Cheng (U.S. Patent No. 6,138,103) in view of Thierauf (article entitled "Decision Making Through Operations Research"). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1-5 and 7-10 are not taught or suggested by Cheng or Thierauf whether taken individually or in combination with each other other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to claims 1-5 and 7-10 so as to more clearly described features of the present invention not taught or suggested by any of the references of record whether taken individually or in combination with each other.

Amendments were made to the claims so to more clearly describe that the present invention is directed to a method of production planning, implemented in a production planning system in response to a request for production planning from a terminal operated by a user, for calculating a plurality of management indices related with production activity of production of products, said management indices being used in the production planning.

According to the present invention, the production planning system upon implementing the production planning method performs various steps. These steps includes making flows of storage into and delivery from a warehouse into models, by monitoring the storage of parts, semi-products and/or products, considered to be in the warehouse in the production activity of material supplied production and/or transportation to a marketing point, formulating processes from the monitored storage of parts until delivery of products to the marketing points into a linear programming problem, by combining the processes including the storage, warehouse and delivery of each item, inputting the data of various constants, inputting the data related to target values of at least inventory, profit, sales, cost, rate of operation, fulfilling rate of demand from marketing point, cash which production activity produces, and an efficiency at which the production activity produces the cash, as management indices, wherein data relating to the target values of the management indices are made of first flag for determining whether being set

or not, the target value, the weighting of each of the management indices and the second flag for appointing that the target value of the management indices is set to be equal to, greater than or less than that, or maximal or minimal, with respect to a numerical value, incorporating the target value, weighting on each of the management indices and the second flag of each of the management indices that have the first flag for determining being set, in restriction condition, solving a linear programming problem, calculating a feasible real value  $x$  so that estrangement being the target of each of the management indices calculated from an executable solution of the linear programming problem comes to minimum, and showing the real value  $x$  calculated on a display of the terminal as the calculated management indices used to produce the products according to the production planning.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by Cheng or Thierauf.

Cheng discloses a method for searching for an appropriate scenario (combination of production items in every term which is equal to a combination pattern of variable) from plural scenarios which have been prepared previously.

The present invention as recited in the claims is entirely different from that taught by Cheng. Particularly, according to the present invention a scenario as taught by Cheng is not specified. Instead according to the present invention restriction conditions and objective functions are specified and the most suitable objective function is adopted based upon searching combinations of all variables which meet the specified restriction conditions. Therefore, according to the present invention even when the same objective

functions is applied, the present invention can be more profitable to operate than that taught by Cheng.

Accordingly, Cheng fails to teach or suggest making flows of storage into and delivery from a warehouse into models, by monitoring the storage of parts, semi-products and/or products, considered to be in the warehouse in the production activity of material supply production and/or transportation to a marketing point, formulating processes from the monitored storage parts until delivery of products to the marketing points into a linear programming problem, by combining the processes including the storage warehouse and delivery of each item and inputting data of various constants as recited in the claims.

Further, Cheng fails to teach or suggest inputting data relating to target values of at least inventory, profit, sales, cost, a rate of operation, fulfilling rate of demands from marketing point, cash which production activity produces and an efficiency at which the production activity produces the cash, as management indices wherein data relating the target values of the management indices are made of first flag for determining whether it is set or not, the target value, the weighting on each of the management indices and the second flag for appointing that the target value of the management indices is set to be equal to, greater or less than that, or a maximal or minimal, with respect to a numerical value as recited in the claims.

Still further, Cheng fails to teach or suggest incorporating the target value, weighting on each of the management indices and the second flag of each of the management indices that have first flag for determining being set,

in a restriction condition and solving a linear programming problem as recited in the claims.

Even further yet, Cheng fails to teach or suggest calculating a feasible real value so that estrangement between the target value of each of the management indices, calculated from an executable solution of the linear problem, comes to be minimum, and showing the real value x calculated on a display of the terminal as the calculated management indices used to produce the products according to the production planning as recited in the claims.

The above noted deficiencies of Cheng are not supplied by any of the other references of record particularly Thierauf. Thus, combining the teachings of Cheng and Thierauf in the manner suggested by the Examiner in the Office Action still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Upon review of Thierauf, it appears that the Examiner is merely relying on Thierauf for an alleged teaching of linear programming. However, at no point is there any teaching or suggestion in Thierauf of the above described features of the present invention now recited in the claims.

Thus, Thierauf suffers from the same deficiencies as Cheng relative to the features of the present invention as recited in the claims. Therefore, combining the teachings of Cheng and Thierauf in the manner suggested by the Examiner in the Office Action still fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 1-5 and 7-10 as being unpatentable over Cheng in view of Thierauf is respectfully requested.


The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 1-5 and 7-10.

In view of the foregoing amendments and remarks, applicants submit that claims 1-5 and 7-10 are in condition for allowance. Accordingly, early allowance of claims 1-5 and 7-10 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.39403X00).

Respectfully submitted,

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